



INDTECH2018

Innovative industries for smart growth

29-31 October, 2018
Vienna, Austria

www.indtech2018.eu
[@IndTech2018](https://twitter.com/IndTech2018)
[#IndTech2018](https://twitter.com/IndTech2018)

PILLAR 2

Session 2.6

Innovative it solutions to enable process and system-spanning data integrity and data usage

Dr. Torsten Osthus

OSTHUS GmbH

31 October 2018

AI / ETHICAL ISSUES OF DATA MANAGEMENT



AI is about
data



AI replaces
jobs



My personal
data is
misused



We need
Data Ethics



Reality:
Data stuck
in silos



Time to
market
prolonged



Huge
Costs



Prevent
Innovations
for Life

Be FAIR to Your Data

Innovation on data is a key asset for digitalization.



AN INDUSTRY EXAMPLE: ALLOTROPE – RETHINKING SCIENTIFIC DATA



Why Allotrope?

- Scientific data stuck in data silos
- Billions of euros lost through IT integration and curation work
- Risks in regulatory compliance
- Barrier to innovation



abbvie **AMGEN** Bayer **Baxter**



Genentech



THE ALLOTROPE FRAMEWORK CONTRACT WAS AWARDED TO OSTHUS IN 2013.

In 2013, a request for proposal to develop the [Allotrope Data Format \(ADF\)](#) was submitted by a consortium of top 20 big pharmaceutical and biotech companies, members of the Allotrope Foundation, seeking to pursue machine learning and artificial intelligence and enable the digital laboratory of the Future.





THE ALLOTROPE FRAMEWORK IN CONTEXT OF THE DATA INNOVATION CIRCLE

Solving the root cause
of the problem:
where scientific data is
produced



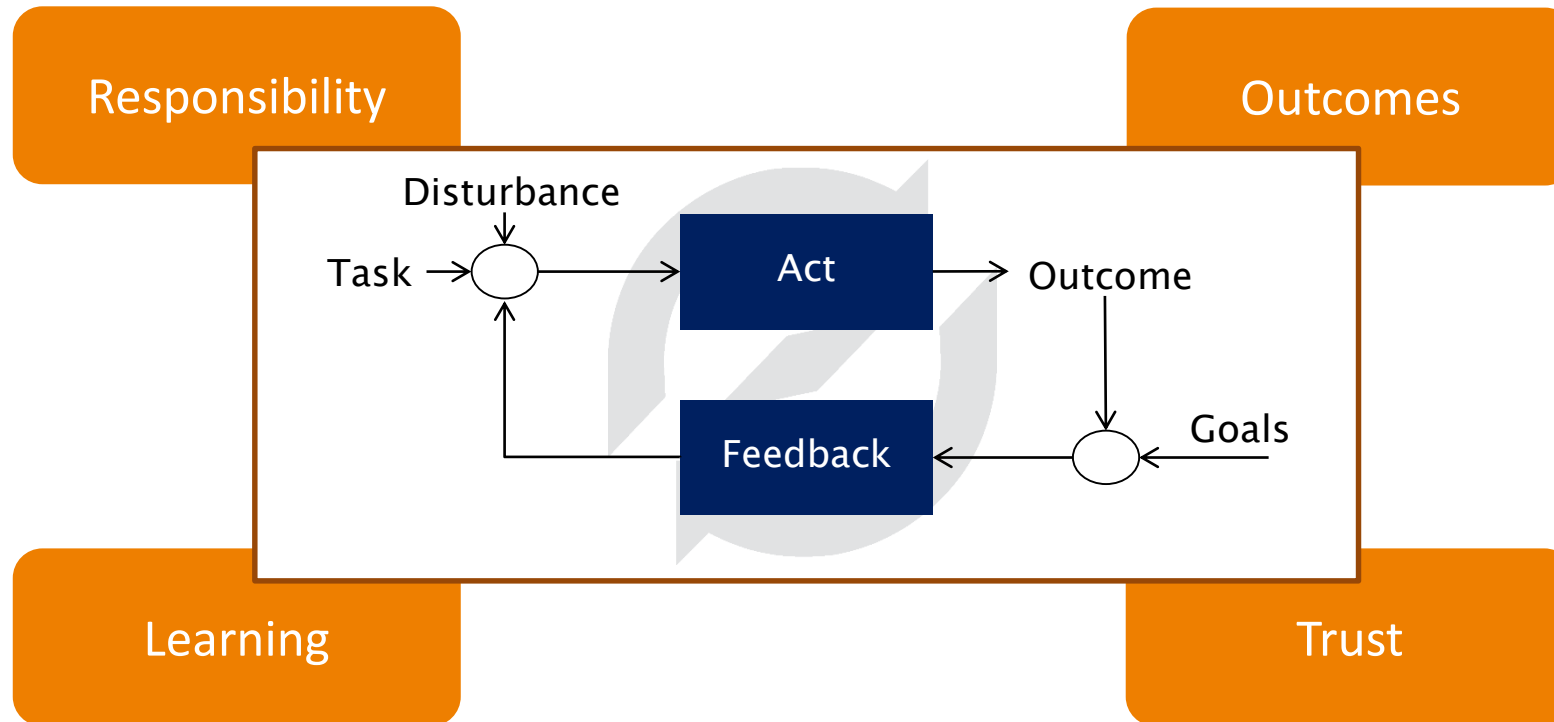
Scientific data is becoming
FAIR and preservable

- Enabling Big Analysis
secures innovation
dynamics
 - Prediction
 - New insights
 - Relevance / data
knowledge



Semantically enriched
data analytics

DATA INNOVATION CULTURE





© Copyright OSTHUS GmbH 2018

This document is protected by copyright. All rights reserved. No part of this document may be reproduced, stored in a retrieval system, transmitted, redistributed or translated, in any form or by any means, electronic, mechanical, photo-copying, recording, or otherwise, without prior written permission by OSTHUS GmbH.

Disclaimer "forward looking statements"

This document contains statements related to our future business and financial performance and future events or developments involving OSTHUS that may constitute forward-looking statements. These statements are subject to a number of risks, uncertainties and factors, including, but not limited to those described in disclosures. Should one or more of these risks or uncertainties materialize, or should underlying expectations not occur or assumptions prove incorrect, actual results, performance or achievements of OSTHUS may (negatively or positively) vary materially from those described explicitly or implicitly in the relevant forward-looking statement. OSTHUS neither intends, nor assumes any obligation, to update or revise these forward-looking statements in light of developments which differ from those anticipated.